INSIDE THIS MONTH:

NEWS ROUNDUP: All the latest developments in the Dragon world. Page 2.

CODED DRAGON: This month we have a machine code utility to offer you, find out more on page 14.

LEARNING MACHINE CODE: The 2nd part of our m/c tutorial series explains more about addressing modes and your first real m/c program, page 4.

STEPHEN COGAN'S ADVENTURE PAGE: Adventure fans can delight in an extra bit this month, plenty of help and hints and tips too! Head west towards page 10.

LETTERS: Send us your letter and we will print it. Found this month on page 3.

COMPETITION: There are three copies of "Gordon Bennet!" to be won this month, have a go on page 6.

REVIEW/SOFT: Some of the latest games are reviewed this month in great detail; Rommel 3D, Vortex Factor and Blackman and also... a book! page 8.

CLASSIFIED: Bargains to be found in here. Sell your unwanted items fast and easily.

ARCADE AVENUE Joystick bashers make tracks for page 7.
EDITORIAL:

Hooray, issue 3 at last! Remember my little moan last month? Well, prepare for an extension of said moan because although there were a couple of people who made an effort and sent something in it still isn't good enough! You will notice that there is no "Program of the Month" in this month's issue, that's because I am no longer prepared to write any more, it's your turn!

Something that may interest you is the fact that Jason Orbaum (the Dragon User person - you know the one who writes funny) has pledged his support and hopefully you will see something written by him in next month's issue. Articles should also be coming in from Roy Coates at some time too. Why am I telling you this? Simple, both of them do a lot of work for Dragon User yet they can still find the time to donate things to DM so I am sure you lot out there can manage at least one article a year! Also it means that they can't back out now 'cos I've told everyone (hee hee)!

If you look through the pages of DM, you will notice that the (few) adverts we carry are offering special prices or free gifts. This is a deal I have made with the companies specially for you Dragon persons and is EXCLUSIVE to DM subscribers so if you want to take advantage of these offers (you'd be fools not to!) then always state that you are a DM subscriber. Also note the bargains I myself have to offer in the classified section, these are not advertised anywhere else - more perks, you lucky people!

It just goes to show that by joining DM you will probably save more than the subscription fee - pass the word around about us, it benefits us all.

Wayne Smithson

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NEWS ROUNDUP:

If you have any news concerning the Dragon and its related peripherals, then why not give us a ring and let everyone else know.

News of 2 new Dragon shows in the forthcoming months (this is becoming a habit!). The first is from John Penn Discount Software who are currently organising another show at CARDIFF AIRPORT in Wales on Saturday 4th October. The last one at Cardiff was a great success so this one promises to be even better. Smithson Computing will be there amongst the many other companies. More details available from John Penn on Bordon (04203) 5970.

The second show that has already been organised is in Kent on November the 4th. Should be plenty of Christmas bargains to be picked up there. Again we will be going along with 9 other companies at the moment. For more details see advert on page 15.

Ron Coates of Micro Vision Software has a machine code patch to enable users to save and load their own screens to and from his recent hit BEANSTALKER. If you would like to know more then contact him at Micro Vision, he was talking about a fee of £1 just to cover costs but there is nothing definite as yet. You’ll just have to matter him.

"ELECTRONIC AUTHOR" is THE machine code word processor. Features include: Automatic page numbering, centering, paragraphing, 51/64 x 24 true upper/lower case screen display with full screen editing; either ‘What You See Is What You Get’ (WYSIWYG) line by line printing or let the computer arrange text, and it is ALL very easy to use. JUSTIFIED TEXT, making your letters, documents, etc., beautifully neat. Full block copy, delete, move included. Repeat key, excellent phrase search, change or delete facility. Fast typing, no missing out characters. Loading/saving rewritten to abolish I/O errors and allowing filenames of up to 20 characters. Comes with full documentation and configure program to allow it to run with ANY PRINTER. Text space available is a massive 19,000 bytes!! DRAGON DOS VERSION NOW AVAILABLE. Cost is £14.95 (cassette) or £19.95 (disk). £12.95...it is an excellent program...easy and very versatile to use. A must for anyone who owns a printer. - T. Bottomley, Wakefield.

"Excellent" - Jason Orbaum, Dragon User.

"...it is advertised as THE word processor for the Dragon...it probably is." - Barry Johnson, Dragon Update.

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GORDON BENNET! is a new multi-screen megagame for the Dragon 32/64. Can you control Gordon through the maze of caverns avoiding steam ing cowpats, man eating toilets and many other nasties as well as negotiating the collapsing floors, rising and sliding pillars, matter transporters, conveyor belts, the list goes on. Walk from screen to screen collecting the lost cargo as you go, returning for the ones you couldn’t get at a later stage. Great graphics, superb sound, a thoroughly daft, silly and enjoyable game! If you don’t agree, we will give you your money back, how about that for confidence!? The cost for this fantastic masterpiece is only an incredibubble £6.99 (cas), £7.99 (DragonDOS) inc. p&p!!!
SEND US YOUR VIEWS, HINTS AND TIPS, PLEASE FOR HELP, SUGGESTIONS ETC., AND WE WILL PRINT YOUR LETTER. COME ON, PUT PEN TO PAPER. SEND TO LETTERS PAGE, DRAGON MONTHLY, 24 COAL HILL GREEN, BRAMLEY, LEEDS 13.

PRAISE FOR DM?

RE: Issue 2 of Dragon Monthly. Although pages 4, 5, 6, 7, 11 are beyond my understanding (as a basic BASIC programmer) and pages 9 and 10 are items I no longer buy (or play even) and hence pages 12 and 13 are of no interest, I still enjoy the production (pages 1, 2, 3 and 14).

Are you trying to rival the D**ly T**gr*p*h for spelling errors or is it accidental? (my joke!) Looking forward to issue 3 for July sometime in August!

Seriously, WELL DONE!! As a one time mag producer I am only too well aware of the frustration caused by lack of (apparent) support. Stick in, your efforts are appreciated.

Brian Jefferson
19 The Green
Piercebridge
Darlington
DL2 3SH.

Wayne says: Well I've got to reply to this letter haven't I? First the spelling errors are completely intershunal becos its us a sue mor letters. Secondly, pages 6 and 7 last issue were in BASIC and so could not have been beyond your comprehension (although I'm beginning to wonder - my joke!). Pages 4 and 5 were a machine code tutorial so if you read that then you might have understood page 11. You didn't actually need to understand page 11 anyway to be able to use the program on it. As for pages 12 and 13, the adventure column, if you bought a couple of adventures, (they can stimulate the brain), you might like it (and you might like to know that Stephen was very upset when he read this!). But seriously folks, I have to cater for everybody so there is bound to be something that doesn't interest you in the mag isn't there.

ADVENTURE BOOK HELP

With reference to M Kennally's letter (DM2), he should find either "EXPLORING ADVENTURES ON THE DRAGON" by P. Gerrard (Duckworth) or "MSX ADVENTURE PROGRAMMING" by S. Lucas (Argus books) very useful. Both should still be readily available from any bookshop.

I found the MSX one to be excellent. MSX BASIC is a version of Microsoft very similar to Dragon BASIC with only a few minor differences. It gives listings for an adventure which has its data stored separately from the main program and a data file which enables you to change anything or all of the locations etc., thus making it possible for you to write your own adventures without any knowledge of programming at all.

There is also a step by step listing of the usual type of adventure with data included in the program. Personally I would choose the MSX book.

J.D. Bateman
Orchard House
Cleator Moor
Cumbria
CA25 5LN.

HINTS 'N' TIPS

I would like to suggest having a high score table in your magazine. I think it is really fab. I have supplied some pokes and peeks which I hope will come in useful. I wish you luck and I am really looking forward to next months issue. Anyway here are the hints and tips:

POKE 362,126 TO TURN OFF KEYBOARD
POKE 362,57 TO TURN ON KEYBOARD
POKE 329,0 TO GET LOWER CASE
POKE 329,255 TO GET UPPER CASE
POKE 359,60 SLOW DOWN LISTING
POKE 359,57 NORMAL LISTING
(more next month - Ed)

Austin Barlow
22 Lime Avenue
Camberley
Surrey
GU15 2BQ.
Welcome once again you wonderful people to the second in the series of machine code tutorials that have enthralled and gripped the nation. You are all following this of course and since I did not receive any letters or telephone calls about the problem I set at the end of last month's page I can only assume that you all did it right, yes? Anyway, the solution is as follows:

START LDA #71 (71 is the code for G)
STA 1184 (1184 = 1024 + 5*32)
RTS (return to BASIC)

Now, as promised last month, I will explain all about addressing modes. Addressing modes determine the whereabouts of data that the machine code instruction has to use. The easiest mode is IMMEDIATE and is denoted by a #. Immediate addressing means that the data is the number following the # so LDA #71 means load A with the number 71 and LDA #0 means load A with the number 0 etc.

The next mode is called EXTENDED and is not denoted by anything. This means that the data used is in the ADDRESS or LOCATION denoted by the number. For example LDA 1000 would mean load A with the number in location 1000 and LDA $7DFE would mean load A with the number in location hex $7DFE ($ means hex remember?). Also STA 1184 means store the number in A at location 1184.

The next one is called DIRECT and is almost identical to extended. The difference is that the address or location is in the range 0-255. This is a special area of memory called the DIRECT PAGE and instructions using the DP are quicker and use less memory. The DP can be moved but that comes much later in the tutorial. So then, LDA 240 would load A with the number in location 240 etc.

Things get a bit more complicated now with INDED mode and is denoted by a comma (,). This mode uses the INDEX REGISTERS X or Y or U and can use the stack $ as well to point to an address or location from which the data is read or written to. So, the easiest form is something like LDA ,X. If X contained 1024 then A would be loaded with the number in location 1024. If X contained 32000 instead then A would be loaded with the number in location 32000. As it stands this is not a lot of use because the extended mode can do the same thing. However it is possible to AUTO-INCREMENT or AUTO-DECREMENT the X register thus: LDA ,X+ for auto increment and LDA ,X- for auto decrement.

This means that if X contained 1024, then after LDA ,X+ A would have the number contained in location 1024, the X register would increment and now contain 1025 so you could now go back to LDA ,X+ and this time it would load in the next value along at location 1025. A short program can explain this usage better:

START LDUX #1536
LOOP COM ,X+
CMPX $7680
BNE LOOP
RTS

There are 3 new instructions there so I will explain those first.

COM (COMA,COMB) - This means COMplement (complement A, complement B) and reverses the bit pattern so COM 11001100 is 00110011.
CMP - COMPare. In this case we are comparing X with the number 7680 in other words "does X=7680?".
BNE (LBNE) - Branch if Not Equal (long branch if not equal). This does exactly what it says. In this case if X>7680 THEN GOTO LOOP ELSE RTS. Please note that the label LOOP is not an address in this case. Branches use a special address mode called RELEVANT - discussed later.
If you have no problem understanding this program (and it is very straightforward when approached logically) then you will have no problem in learning machine code provided you stick at it. Auto decrement works in the same way as auto increment except that the register is decremented BEFORE the operation is done as opposed to increment when the register is incremented afterwards.

Indexed addressing does not stop there however, you can also offset the registers for example LDA 1000,X would load A with the number in the location X+1000. If X contained 1024 then A would be loaded with the number in location 2024, geddit? Likewise LDA 32,X would load A with the number in location 1056 (1024+32). The offset is in two complement form. This means that negative numbers can be represented too. The range of the offset is actually -32768 to 32767 so LDA -32,X would load A with the number in location 992 (1024-32). For those of you who do not know what two complement is I will explain it next month but it is just a means of representing negative numbers in binary form.

The offset can also be accumulators, ie LDA D,X. If X contained 1024 again and D contained 4000 then it would load A with the number in location 5024 (4000+1024) it is so easy is it not!? You could also have LDA A,X; LDA B,X (A and B in range -128 to 127). Indexed addressing also allows us to write PCC or Position Independent Code which is mega cool and hip to the beat groovy on down man because you can do it on yer 6502 naff! This is very powerful and I will donate a whole article on it later. One last point on those auto increment and decrement, I forgot to mention you can also have X++ and --X which would increment and decrement by 2 and is useful when you are loading in 2 bytes at a time (ie LDD ,X+2) (remember D in 16 bits wide so can load 2 bytes which is 8 bits each). Also remember that where I have used X throughout this section, the same applies to the Y,U registers and S stack although very very rarely do we use S. U is strictly speaking a stack I always use it as a third register as do most programmers.

The other main addressing mode is called INDIRECT and although not used that often it can be a pain in the accumulator to use! Indirect addressing is denoted by brackets, ie LDA (1024). Indirect often includes other forms of addressing modes within it like LDA (B,Y) which is a form of INDEXED INDIRECT addressing (sounds like fun you will be saying!). But what is indirect addressing? Well, it is when the number or data required is in the location pointed to by the address stored in the address given in the instruction!

Let us take the example of LDA (1024). If location 1024 contained $70 and location 1025 contained $4EE and hence the address pointed to by location 1024 was $7DEE (see why hex is handy because you can just join your 2 numbers together? And also remember that most addresses are 16 bits so need 2 locations to store it). If location $7DEE contained the number 200 then LDA (1024) would load A with the number 200 since the computer would go to 1024 see what address is stored there then go to that address and find the data. Simple eh?

For the example of LDA (B,Y) you would do the exact same thing only the first address the computer would look at is B+Y because like in maths, you work out the inside of the brackets first. Easy for the computer, pain in the bum for human types!

As a problem for you to solve for next month, see if you can write a routine to copy the block of memory between 1356 and 7679 to the memory between 7680 and 13823. You will need to use more than 1 register and also the CMP instruction and the BNE instruction as well. Do not forget to finish with an RTS instruction. You will be able to see if it correct because this routine would copy the first PMODE4 graphic screen onto the second so remember to PCLEAR8 before executing the routine if you are intending to try it out. Answer next month....Byeeee!........................Wayne Smithson
Hello and welcome to a new and regular feature of Dragon Monthly, a puzzle page. As I'm not exactly sure how much space the puzzles require it's straight down to business. Firstly, please send any mail regarding the puzzle page to me instead of Wayne (who has enough to do already and will only forward it to me anyway!). My address is Ian Rockett, 2 Knowle Road, Burley, Leeds, LS4 2P3. Don't just send in entries, let us know what you think; ideas, suggestions (legal!) etc. As this is the first puzzle issue, as well as the usual prize competition we are offering an extra mystery prize for the first correct crossword solution out of the hat (or the best effort if no one cracks it!). You don't have to send in your entries on the actual magazine grids etc., either send them in on a copy or in any UNREADABLE form, nice and neat. Good luck.

* DRAGWORD 1 *

Win a mystery prize.


:: DOWN :: 1. Where the joystick goes, or food? (2,6): 4 'One' Dragon? (3): 5 A T.Mix maze chase, or how to get a girl? (7): 7 A fearless adventurer, or a honest girl? (8): 8 Complete all of the screen and you may get one (5,3): 11 Q. Why did the temp buy discs? Yes, so he could have a (3): 15 The unbotchable (3): 17 Do...Until, For, Next etc. (5): 19 CP0 as a 60's detective? (or sindie?) (8): 22 ? (5): 24 A 3-D program from Salvamend (3,6): 25 A small pen?, or what I can never get in adv. (7): 28 Like the ale in Ring of darkness (6): 30 snailivedwacabelonaeveth (7): 31 As in work or profit (3): 32 A naughty comp. user! (6): 36 A military systems language (3): 37 Funny thing, but all aw. prices begin with this (4): 40 POKE26,61NEW may help (2): 42 M.C. op., like the N.H.S. (3): 44 Sadly, like this word, the Dragon isn't anymore (3): 45 It's all I can ever do in adv. cells! (3): 46 It's heavenly, by George! (2)

How'd you like to win a copy of, well, see if you can guess (first correct guess gets a free early copy). All you have to do is complete the grids with your own words, no names, places, slang etc. Also, once a word has been used then it cannot be used again, anywhere. Easy isn't it?, in fact, it's too easy so to win the prize you must also send the answers for the following 2 puzzles.

CD: DRONE LORD, FAN AT A GRAND DO DREAMS LAVA'S FAKE TOP IS TORN LEFT. <2 TROPICAL PEP (A BRAN WINE), CHINA TOM'S SEEN IT IN A TRAIN TODAY. The clue for puzzle 1 is 's/w houses', for puzzle 2 it's 'computers'. There are 3 copies of (Bongo Ted Rand?) to be won so don't just sit there and wait for someone else to win one, win one yourself! All entries in by Aug. 31st. Remember, you've got to be in it to win it!
This month I am going to give all the codes for Micro Vision's
Bean-Stalker, the 60 screen strategy/arcade game. The codes are as follows:

CODE No 1: Extra Lives: Load game as normal start game, then press CLEAR key and (X) together (The longer you keep holding these keys down the more lives you will gain).

CODE No 2: Screen to Screen: Start game then press CLEAR and (N) keys down together. This will move you on to the next screen every time you press them.

CODE No 3: Screen Designer: This requires choosing option No. (5) at the menu. After pressing 5 type REGISTER and then press <Enter>. It then should say IS TAPE READY Y/N? Type N for no. It will now go back to the menu screen. Now Press <8>, <ENTER> and <X> all together and you should now be on the screen editor menu.

You will find that you can't save your newly designed screens to tape,* unless you can hack in to the program but that's a bit of a pain. However it is still fun to play your own screens (a million bananas on every screen!) Anyway I hope that will keep you going for a month. If you don't have this game it's available from Micro Vision at 7.95 (6.50 through DM - Ed). If you have any cheats or hints then send them to little old me at this address: STEVEN ROPER, DRAGON MONTHLY, 24 COAL HILL GREEN, BRAMLEY, LEEDS 13, ENGLAND.
(Bye!!)

* Roy Coates said that he has a m/c patch to remedy this but he doesn't know what to do with it (after the sassy comment in DU about the title of DM Roy, I can tell you exactly what to do with it!). So, if interested contact him at Micro Vision - Ed.

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**STEVEN ROPER'S ARCADE AVENUE**

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This advertisement is for Bean Stalker, a game developed by Micro Vision, and features a colorful image of the game. The text promotes the game and provides tips for players, including how to access extra lives and design screens. The advertisement also includes a note from Roy Coates about a modification patch and a humorous comment on the title of the game. The game is noted as being available from Micro Vision, with pricing details provided. The advertisement is in English and is targeted at gamers.
Whether you belong to a company or are an individual, if you have a program you would like reviewing then send it to REVIEWSOFT here at Dragon Monthly. Let us tell the Dragon world about your program!

PROGRAM: Rommel 3D
TYPE: Arcade/strategy
PRICE: 5.95 (cass)
SUPPLIER: MICRODEAL
PO BOX 6B
ST. AUSTELL
CORNWALL
PL25 4YB

Remember "Battlezone" the tank battle of the arcade halls? Well, that's what this is and it is one of the most faithful copies I have seen. The graphics are very smooth and the game is very fast (maybe a bit too fast). The only other version of Battlezone I know of on the Dragon is Rommel's Revenge, and in my opinion Rommel 3D is much better.

You control your tank via the keyboard moving in any of 4 directions and blasting any enemy tanks in sight! The 3D animation of the enemy tanks turning to fire then racing away from you when you chase them is superb and it soon becomes clear that a strategy is needed to avoid being hit by enemy fire. Simply moving sideways to find tanks is not good enough, you have to weave about backwards and forwards to outrun the tanks and their shells then race back to fire at them, this is one addictive game.

Once a score of 10000 has been reached the planes (or spinning warhorses as I used to call them on the arcade version) come flying at you and usually you only have one shot to get it otherwise its cracked screen time! Another nice touch is the change in modes and colour sets, I preferred the pmodels graphics as the colours of the enemy tanks are more noticeable - I had a tendency to blast the hell out of a triangle thinking it was a tank in pmodels!

My only criticism of this game is the fact that is too damn fast!! An option to slow the game down a bit for beginners shouldn't have been too much trouble to include but apart from that this is an excellent copy, and well worth the money. Definately a 5/5 rating.

Wayne Smithson

PROGRAM: The Vortex Factor
TYPE: Graphic Adventure
PRICE: 5.95 (cass)
SUPPLIER: MICRODEAL
PO BOX 6B
ST. AUSTELL
CORNWALL
PL25 4YB

When I first loaded the vortex factor it became apparent that this was Trekboer's younger brother (It's written by the same team). The story goes, now that you have completed Trekboer you go back to earth where a commemorative museum has been built, this is where you come in. You are snooping around said museum looking for treasures for some reason and the locations are pictured graphically. The graphics are some of the finest I have seen, even better than those in Trekboer, it also has more locations and a bigger vocabulary.

The idea of the game is to find all the hidden treasures (not at all easy I can tell you). In the museum there is a time machine with the initials H.G.W. The date is the 15th of June 2063! H.G.WELLS time machine is on display but the thing is that it doesn't work just yet and getting it to go is a real test. Once you have managed it you can go forward or back in time to your hearts content. There is even a wax museum with Charlie Chaplin and Marilyn West, (Quite A Gal, Eh Sweetie!).

This adventure is one of the best I have seen for a long time and in certainly the best value adventure around at the moment. The graphics are well designed (some of them even move!) this is a real winner. A stunning graphic adventure.

Steven Roper
I can't help feeling that once I'd read the book I should have known most of the information anyway. That's not to say that I didn't find the book interesting and there was no harm in having all the information in one place. I especially found the examples of the type of material found on bulletin boards interesting. I think that, although quite expensive at £6.95, it is well worth the money BEFORE you spend 10 times that amount on a modem but don't expect any amazing revelations, there aren't any.

Barry Johnson

PROGRAM: Block-Man
TYPE: Arcade/strategy
PRICE: ???? (cass)
SUPPLIER: Starship Software
23 Tintern Road
Cheadle
Hulme
Cheshire SK8 7QF

This review contains sound effects in <brackets>. Blockman is a copy of the old game Grid Trap, what you have to do is control 'Tiptoe', the block man. The object of the game is to get six flags whilst avoiding the poisonous sheep <brackets> <brackets> and also defuse the Bomb <brackets> <brackets>. The only trouble is that the timer in the bomb is running out fast! There is a joystick, keyboard, pause, sound mute and restart option.

The first screen involves getting the flags stepping on stepping stones that disappear behind you so you need to work out a route. The second screen is a maze in which you have to get six flags again and defuse the bomb. There is a nastie killer called Eugene who will bounce around on the screen just to complicate things, he will kill you if he jumps on you, <brackets> <brackets>. Thankfully he leaves stepping stones behind him though.

This all sounds very good but unfortunately Blockman is not a well written game, for a start it's written in BASIC with a m/c loader. The sound is very uninspiring and the graphics are NOT very spectacular. I have seen better games from Starship Software, they have over ten titles now but if I were Starship I wouldn't include this as one of them <brackets> <brackets>.

Steven Roper

The chapter on 'Hackers intelligence' is another myth remover (I use myth balls! - Ed). Mostly you need to pay attention to the right (?) pages on bulletin boards and attend every club meeting or computer convention that you can get to. Moving on to techniques, there is brief coverage of phone tricks, passwords, hardware fixes, operating systems and security.

The author has touched on networks and videotext and also contains several appendices giving details of RS232 ports, modems and services, ASCII codes etc.
For this month's column it will be again mostly reviews, don't blame me if there aren't many reader's letters in, if you don't send them I can't print them. So GET WRITING!

Many months ago I receieved two adventures from ADVENTURESOFT in case you haven't heard of them they distibute CHANNEL 8 and ADVENTURE INTERNATIONAL software, anyway here are the reviews, (less sarcasm this month).

When I loaded Adventureland from AI they weren't going to let me forget that it was a Scott Adams adventure, he seems to be the most publicised writer around. Stopping off for a chat at 'Pauls Place' I received some goodies (treasures to you dear readers). The whole idea of the game is to collect a number of treasures return them to the tree stump and yes, say 'score'. There are plenty of commands including magic words which you have to SAY. There are also things you'd expect to find in adventures (wait for it!) problems! How to get past chiggers without being bitten, if you are bitten then a quick INVE reveals you are carrying.... chigger bites!

I agree with AI that this is an adventure for the beginner though if you're looking for something easy I would give it a look. A clue on how to destroy the bricked up window; a little gas can be explosive with care and attention. Adventureland also contains some classic problems, how to get the treasure off the hungry bear, how to get the honey off the african bees and of course it has the inevitable flint and lamp.

One last thing about Adventureland is it contains a "Limbo" in which you appear when you die and if you find your way out then you continue in exactly the same state as you were when you died. In Limbo you can also QUIT if you have for example been infected by chigger bites. I particularly like the screen layout as the text description and objects are in the top third of the screen and the responses are in the bottom two thirds. Rating 7/10.

For my next trick I'll be reviewing Circus Adventure from CHANNEL 8. The scenario goes that your car has run out of petrol miles from anywhere (sounds like a job for the RAC to me) and on your search for petrol you come across a giant circus tent. As it says in the blurb it's no ordinary Circus .... yes where are the people to deprive you of your money! Starting the adventure in a field I soon encountered that age old problem where to get a light. JO UIF CPPU (no it's not my spelling but a code, to crack it look at the end of the column). Once inside the circus tent I soon started playing the clown, a fellow clown told me that we were doomed to stay there for ever unless someone could destroy the tent. Being practically minded I threw a spanner in the works... literally! The only problem being I got blown up in the process. On my way up into space I saw a tightrope and a trapeze but no safety net. But no problem I can do without. After becoming part of the earth I resurrected myself with the help of ye save position and discovered that seals like fish, (shock horror!). I also discovered plenty of other amazing things such as if you get angry with something that doesn't open then all you have to do is LOL JL. If I can become serious for a minute then the rating I'd give for this is 7/10. If you get this from COMPUTAPE for £5.50 for two then I would rate both of these adventures 9/10, but if you buy them from ADVENTURESOFT at £7.95 then I would only rate them 6-8/10.

A lesser known company is BROOMSOFT who specialise in adventures. Their first offering is Space Trek I and Dream Machine on the other side of the tape. I particularly like Space Trek I because of it's original idea of you not just commanding Jo Smith average adventurer but four different characters who have different talents not just understanding but doing useful things like saving the
Anyway enough of this drivel and onto the scenario. It is may 26 2041 a space born disease has been discovered. Only days later a cure was found, the only problem was (or is it going to be?) that the basis for the cure was extremely rare and the only ship around a deposit of Ryetalin was your ship. So now you are thinking no big deal, but most of your crew have gone down with the disease, (ah!). Your ship is vast as there is an engineering deck, a shuttle deck, a medical deck, a transporter deck, a crew deck and of course the command deck. You can assume control of any of the four characters; Captain Christopher James, Science officer Sevlon, Doctor Michael Spears, Chief Engineer Hamish McCrindle. There are also four other characters who seem to sit around doing nothing in particular.

Proving I was no slacker I got the ship underway in no time and a quick LOOK out the viewscreen told me that I'd arrived at the planet Holberg. After my exertions I decided to explore the ship and came across a bottle of whiskey, that soon showed which character he was similar to on a certain program (does 'to boldly go' sound familiar?) that's McCrindle not James by the way. There are pretty obvious commands like on the transporter plates you use BEAM DOWN. You are able to call any of the characters using Comm-Units which are liberally placed about the ship. There are plenty of locations on ship and you can get to them logically e.g. going through a service hatch might take you onto a ladder which goes back to the same level or onto the one above. It gives you the feel that you are really exploring a real ship. Once I decided to see what I really looked like (James that is) and transferred to another character to get a better look only to be told that it's rude to stare, well! Trying to get down to the planet's surface I put someone in one of the shuttles and went to press the intercom and someone answered. I got all of them together and went down to the surface and explored a bit only to be stopped by a force field. Seeing as I'm running out of space I've got out of telling you how to get past it. Rating 7/10.

The other adventure will have to be a short review as I'm pushed for space. The story goes that you were standing by a Professor's 'Dream Machine' when a weird monster jumps out grabs the professor and tells you that if you want to see him back then you must collect a few items for him. Your travels take you across deserts, through houses and such like. I think you get the idea now. This adventure makes the tape excellent value at £4.00.

Now a couple of letters from readers of my column. Pete Ward of 25 Mazzard Close, Landkey, Barnstaple, North Devon, EX32 0LL, offers help on the infamous El Diablero which I would give 10/10 for problem difficulty. I must say that you should send an SAE if you want help from him (or me for that matter). Pete is stuck in Perseus and Andromeda, he needs help at a place with a cracked wall. Any offers?

Now here is another adventure which I would say is amongst the hardest on the Dragon, River of Fire by J.Morrison Micros who have deserted the Dragon for reasons unknown. Martin Wailer and I would like help on this adventure, how to get past the first graphic maze. Martin lives at 3 Axbridge Avenue, Sutton Leach, St Helens, Merseyside, WA9 4NZ.

If any of you out there have any views on a reader's adventure chart where you vote your top five or ten adventures every month then write and tell me. I will also be offering an adventure 'phone in where you ring me up and run up your phone bill telling me what adventures you've solved, need help on or just want a chat. Friday evenings from 6.00 - 9.00 on (0532) 689783.

This month's help will be again made up of my own. On The Vortex Factor to get a light, go to London (something in the safe will help you, the combination of the safe is: FMFWO UXFOUZ GPVSUZ UXG and that is the numbers as words converted into code). Carrying the CJSE and the TUSJOH which you found in the cell. (In case you didn't get out of the cell you should have used the
IBDLTB). Finally to get the light you should NBLF DBOEMF. If you are looking for treasures in London then you should examine the fittings (that should give you a big enough clue).

In Caverns of Doom to get started examine some walls, don’t limit your thinking to only one lamp. Use all the commands listed on the cassette inlay and take note of some of the items. It is pretty unlikely that you will finish it on your first game so make good use of the save position. (These could be used for a number of other adventures). For those more advanced on COD (I like abbreviations if you haven’t noticed) to get past the boulder placed high up experiment putting the dynamite on different places and you should gain access to a lot of new locations.

Phew! That lot should keep you going for a month. Just a mo, what page is this? Dope! I’ve written too much, sorry I won’t do it again. (very likely-Ed). This column’s for you lot you know so PLEASE contact me at 12 SANDHILL MOUNT, LEEDS, LS17 8EQ.

To crack the code, move each letter back one, ie. U=>T, A=>Z, R=>Q etc.

John Penn
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If you have any machine code utility programs, why not send them in, providing they are your own work of course!

This month we have a different way of changing screens. Instead of copying the second graphic screen onto the first via PCOPY, this utility will make changing screens a lot "flashier".

What it does is to clear the graphic screen (pages 1-4) from top and bottom, meeting in the middle then immediately copy the contents of graphic pages 5-8 starting from the middle and working out to the edges. The effect is quite good!

The code is position independent so you can locate it anywhere in memory. I have included the assembler code for those interested. You can either enter the program via an assembler or via a hex loader (there is one in last months issue).

For the hex loader, you have to type the numbers in the second column of the listing into DATA statements. For example, the first DATA line would read something like:

```
100 DATA BE,0C,00,CE,23,E0,C6,20,34,40,6F,80,6F,0C,5A etc.
```

Before executing the routine, the screen to be copied should be on the second PMODE3 or PMODE4 graphic screen (pages 5-8) and the screen to be erased should be on the first graphic screen (pages 1-4). In the listing, the numbers in brackets are for tape users. As the program stands, it will copy the pages with DragonDOS in place. To alter it for tape use, you have to exchange the numbers, for instance the first instruction would be LDX #1536 and not LDX #3072 etc.

Remember to CLEAR memory before typing the machine code in too. For instance if you want to put the code starting at location 32000 then CLEAR200,32000 first. Happy Coding!
PRINTER BARGAINS: I can get hold of some ex-demonstration Triumph Adler full size (upto 180 cpi) daisywheel printers, the exact same model that printed this magazine, for £150. They are worth well over £350 and I can only get a few so first come first served. I can also get Brother HR5's for £70.00. Telephone me (Wayne) on 0532 551631 or write to me at 24 Coal Hill Green, Bramley, Leeds 13.

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